

Claims

What is claimed is:

1. A method of modifying a lock associated with a resource in a distributed environment, the method comprising:

5 receiving a request to modify the lock, wherein the request originates from a requesting client computer system;

analyzing the request to determine whether the request is made by the lock owner;

and

10 if the request is made by the lock owner, modifying at least one property associated with the lock.

2. The method as defined in claim 1 wherein the method further comprises:

15 following the determination of whether the request is made by the lock owner, determining whether the resource is locked by another client computer system that may conflict with the requested modification; and

if the resource is locked by a conflicting lock, denying the received request.

3. A method as defined in claim 1 wherein the request relates to modifying the lock type.

4. A method as defined in claim 1 wherein the request relates to the modification of the lock scope.

20 5. A method as defined in claim 1 wherein the request relates to the modification of the lock ownership.

6. A computer program product readable by a computer and encoding instructions for executing the method recited in claim 1.

7. A computer program product readable by a computer and encoding instructions for executing the method recited in claim 5.

8. A computer-readable medium having stored thereon a locked resource, wherein the locked resource comprises:

5 a resource object data section for storing actual object data;

a lock object, wherein the lock object comprises a plurality of properties, wherein a first property identifies a lock owner, and wherein the properties may be modified by the lock owner.

9. A computer-readable medium as defined in claim 8 wherein a second property
10 relates the resource object and wherein the second property may be modified by the lock owner to associate the lock object with a second resource object.

10. A computer-readable medium as defined in claim 8 wherein the lock owner may modify the first property relating to lock ownership to transfer the lock object to a second owner.

11. A system for modifying a lock object in a distributed environment, the distributed environment having a plurality of resources and wherein at least one resource is associated with the lock object, the system comprising:

a receive module for receiving a resource request from a requesting process,

5 wherein the request includes modification information;

a determination module for determining whether the requesting process owns the lock object associated with the resource; and

an update module for modifying the lock object upon a determination that the requesting process owns the lock object.

12. A system as defined in claim 11 wherein the determination module also determines whether there is a conflicting lock associated with the requested resource and wherein the update module does not modify the lock object upon a determination that a conflicting lock exists.
13. A system as defined in claim 12 wherein the lock object has a lock type property, and wherein the update module modifies the lock type property.
14. A system as defined in claim 12 wherein the lock object has a lock scope property, and wherein the update module modifies the lock scope property.
15. A system as defined in claim 12 wherein the lock object has a lock ownership property, and wherein the update module modifies the lock ownership property to thereby transfer the lock object from one process to another.
16. A system as defined in claim 11 further comprising a transfer module for transferring ownership of the lock object from the requesting process to another process.
17. A system as defined in claim 11 wherein the requesting process communicates with the receive module using Web Distributed Authoring and Versioning protocol.